LJMU Research Online

Green, NR

 Using ICT within PE: its impact on a working department

http://researchonline.ljmu.ac.uk/id/eprint/561/

Article

'Using ICT within PE – Its impact on a working department'

Nigel Green – Deyes High School, Maghull - Sefton

Introduction

My initial experiences of computers were the original BBC's, and I could not see how they would make life more efficient for a PE department or myself. A *'number of years later'*, ICT now has a significant effect on PE departments throughout the country. In this article, I intend to highlight some aspects of ICT that my own and other departments have utilized. By sharing this information, I hope to encourage those less confident to have a go, whilst at the same time supporting those who are taking this aspect of our work further day by day.

I intend to suggest what to buy and how it can be used to make our life more efficient, whilst at the same time maximising our student's education experiences in Physical Education.

What to buy and how to use it

    a. **TV/Video** – A television with integral video is easiest to use and move about. It is useful for:
        i. Playing short video clips to highlight particular techniques or examples of excellence. E.g. a jump shot in basketball.
        ii. Analysis of performance at both GCSE and AS/A Level.
        iii. Appreciation of dance choreography.
        iv. Showing teaching or motivational videos in the changing rooms, whilst pupils are getting changed. This allows an input prior to a lesson e.g. a sequence of tries demonstrating flowing play in a rugby match.
    Ideally it is useful to have one TV/Video in each teaching Area, but finance may restrict this.

    b. **Trolley -** A three level trolley allows you to have the TV/Video on top, with a CD/Tape player underneath and a place for an extension cable and other necessary resources.

c. **Digital camera –** This has got to be the most influential piece of equipment for teaching PE. They can:
   i. Produce short video clips, up to 2 minutes, which have a tremendous impact on learning and are very successful when used for observation and analysis.
   ii. Take still photos, which can be produced quickly for display.
   iii. Have the most significant impact when being used in trampolining, gymnastics, badminton and basketball, where a brief moving picture can be played backwards and forwards, highlighting correct technique or/and weaknesses that need attending to. Significant progress can be seen in these instances.

d. **Video camera –** As with the digital camera, they have similar uses. They are:
   i. Very useful for reviewing work and observation and analysis e.g. gymnastics and dance sequences.
   ii. Vital for recording GCSE and A Level practical evidence.
   iii. Very useful for reviewing trainee teachers working and teachers demonstrating good practice (yourself if you are brave enough).
   iv. Very useful for moderation purposes internally – obviously with the new National Curriculum Levels, it is important to standardise levels within your school and within your local authority.

e. **CD/Tape player -** Essential for dance, gymnastics, aerobics and HRF (bleep test etc.)

f. **CDI Player**
   i. This is an interactive piece of equipment of particular use in dance lessons. It allows you to pause, reverse, slow down, show different angles etc. An example of this is 'Wild Child' produced by Ludus Dance Company, which was made specifically for this equipment. I believe that there are also other activities that are available.

g. **Computer** – Linked to the schools Intranet and the Internet. Obviously the latest spec. is best, and a lap top is more portable (but also more likely to walk!). They are useful for:

i. CD ROMS – Self supported study (GCSE and A Level), for teaching ideas such as the latest ECB 'Howzat' Cricket version from which you can generate lesson plans and ideas from a massive source CD, AAA's Athletics 5* Awards scheme results, for information e.g. Encarta etc. The list of these is endless.

ii. INTERNET – WWW. Web sites – are useful for research, information, teaching and learning resources e.g. GCSE and A Level BBC Bitesize.

iii. Email – for correspondence e.g. fixtures, information from fellow teachers etc.

iv. School Web page – for displaying information about your school or/and department.

v. Word Processing – for schemes, letters, references, homework's, lesson plans, work sheets, management of extra-curricular programme, team lists etc.

vi. Microsoft Publisher – for posters and homework's

vii. Programmes using a split screen of expert and student on the same screen, for observation and analysis.

viii. Power Point – for presentations to groups, open evenings, lessons etc.

ix. Data Bases – for exam results, assessment grades, trip information etc.

x. Spreadsheets - for exam results, sports day results etc.

xi. Sims database for optically read report systems – great for ensuring that the comments made are appropriate to the National Curriculum and reflect the levels being attained.

xii. Data logging/monitoring – recording and analysing heart rate response to exercise – GCSE or/and A Level.

h. **35mm Camera with tripod**

i. Useful for pictures for display – school teams, special events etc. (These are usually better quality than digital camera prints and cheaper than using outside agencies).

Although this is not an exhaustive list, hopefully it may be of use to you and encourage you to test the waters with regards to ICT in PE.

How we use ICT in School

We use a television with integral video and a video camera, for playing short video clips to highlight particular techniques or examples of excellence, analysis of performance at both GCSE and AS/A Level, appreciation of dance choreography and showing teaching or motivational videos.

We use a digital camera that produces short video clips, up to 2 minutes, which has a tremendous impact on learning and is very successful when used for observation and analysis, where brief moving picture can be played backwards and forwards, highlighting correct technique or/and weaknesses that need attending to. This camera also takes still photos, which can be produced quickly for display.

Our CDI Player is an interactive piece of equipment of particular use in dance lessons. It allows you to pause, reverse, slow down, show different angles etc

Our Computer is linked to the Internet and is invaluable for word processing documents, Power Point presentations to groups, open evenings and lessons, Databases for exam results and assessment records.